

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-28 (Canceled)

29. (New) A process for the synthesis of a polyisocyanate composition comprising acylureas, comprising the step of reacting a "starting" composition comprising derivatives having at least two isocyanate functional groups with at least two acids, one at least of which is a strong acid with a $pK_a \leq 3$, and another at least of which is an acid of moderate strength with $3 \leq pK_a \leq 6$, at a temperature at least equal to 50°C.

30. (New) The process as claimed in claim 29, wherein at least one of the isocyanate derivatives is a monomer.

31. (New) The process as claimed in claim 29, wherein the monomer derivatives represent at least 1/3, optionally 1/2, by weight of said starting composition.

32. (New) The process as claimed in claim 29, wherein the monomer derivative or the monomer derivatives represent at least 90%, optionally 95%, by weight of said starting composition.

33. (New) The process as claimed in claim 29, wherein the monomer derivative or in that at least one of the monomer derivatives is at least partially aliphatic, that is to say that at least one, optionally all, of the isocyanate functional groups of the diisocyanate unit is/are carried by a carbon of sp^3 hybridization.

34. (New) The process as claimed in claim 29, wherein said polyisocyanate composition comprises derivatives having a biuret functional group and wherein said starting composition is further reacted with an amine or an amine-generating reactant, optionally water in the form of a fluid.
35. (New) The process as claimed in claim 34, wherein the molar ratio of the amine generated or added to the sum of the monomers, expressed in moles, extending from 1/2 to 1/50, optionally from 1/3 to 1/25.
36. (New) The process as claimed in claim 34, wherein said starting composition is brought into contact with water in the presence of said moderate and strong acid(s), optionally added beforehand.
37. (New) The process as claimed in claim 29, wherein the strong acid is an aliphatic sulfonic acid, an aromatic sulfonic acid, an aliphatic phosphonic, or an aromatic phosphonic including carboxylic-phosphonic, ester phosphoric or perhaloalkanoic acids.
38. (New) The process as claimed in claim 29, wherein the moderate acids are aliphatic or aromatic carboxylic acids.
39. (New) The process as claimed in claim 29, wherein the moderate acid(s) is (are) at least partially added to the reaction medium in the form of a precursor.
40. (New) The process as claimed in claim 29, wherein the strong acid(s) is (are) at least partially introduced into the reaction medium in the form of a precursor.

41. (New) The process as claimed in claim 29, wherein at least one of the moderate acids differs from at least one strong acid by at least one pK unit, optionally 2 pK units.
42. (New) The process as claimed in claim 29, having a content of strong acid(s) is chosen so that the molar ratio of the sum of the strong acid functional groups, expressed as equivalents, to the sum of the monomers, expressed as moles, of at least equal to 0.1 ⁰/00, optionally to 1 ⁰/00.
43. (New) The process as claimed in claim 29, having a content of strong acid(s) is chosen so that the molar ratio of the sum of the strong acid functional groups, expressed as equivalents, to the sum of the monomers, expressed as moles, of at most equal to 2%, optionally to 1%.
44. (New) The process as claimed in claim 29, having a content of moderate acid(s) is chosen so that the molar ratio of the sum of the moderate acid functional groups, expressed as equivalents, to the sum of the monomers, expressed as moles, of at least equal to 2 ⁰/00 optionally to 1%.
45. (New) The process as claimed in claim 44, having a content of moderate acid(s) chosen so that the molar ratio of the sum of the moderate acid functional groups, expressed as equivalents, to the sum of the monomers, expressed as moles, of at most equal to 10%, optionally to 5%.
46. (New) The process as claimed in claim 29, wherein said strong acid is added in a dilute form, optionally a form diluted with 1 to 20 times, its weight of diluent.

47. (New) The process as claimed in claim 46, wherein said diluent is water or a C₁ to C₁₄ alcohol, optionally a C₃ to C₁₀ alcohol.
48. (New) The process as claimed in claim 46, wherein said strong acid is diluted in said moderate acid.
49. (New) An isocyanate composition comprising at least 1% (by weight), optionally at least 2%, of acylureas of at most 5 diamino units.
50. (New) The composition as claimed in claim 49, comprising at least 1% of monoacylurea.
51. (New) The composition as claimed in claim 49, comprising at least 2% of diacylurea corresponding to at least one bifunctional acid.
52. (New) The composition as claimed in claim 49, comprising, by weight, at least 10%, optionally 25%, of true biuret.
53. (New) The composition as claimed in claim 49, comprising, by weight, at most 4/5, optionally at most 1/2, of true biuret.
54. (New) The composition as claimed in claim 49, having a ratio by weight of the monoacylureas (numerator) to the oligomers of at least six diamino units, of at least equal to 2%, optionally to 7%.
55. (New) The composition as claimed in claim 49, having a ratio by weight of the monoacylureas (numerator) to the oligomers of at least six diamino units, of at most equal to 50%, optionally to 20%.